DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025470

Address: 333 Burma Road **Date Inspected:** 05-Aug-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1530 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: Steve Mc Connell and John Paglie WI Present: Yes No

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: SAS** Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation 13Meters, Electro Slag Welding (ESW) T-joint E-042 location 'K', QA randomly observed ABF/JV qualified welder Richard Garcia perform CJP groove welding repair on the welded cover due to ABF QC noted overlap at approximately Y=9170mm to Y=9780mm. The welder has ground and removed the overlap then tested by QC Steve Mc Connell using Magnetic Particle Testing (MT) with affirmative result. The removal was verified by this QA and obtained same result. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1001-Repairs. The weld cover repair was preheated to more than 300 degree Fahrenheit using propylene gas torch prior welding. During the shift, ABF QC John Pagliero was noted monitoring the welder. Measured welding parameter during welding was 125 amperes. At the end of the shift, 3G SMAW weld cover repair was still continuing and should remain tomorrow.

At Tower Base Elevation 13Meters, Electro Slag Welding (ESW) T-joint E-043 location 'Q', QA randomly observed ABF/JV qualified welder Jeremy Dolman perform CJP groove welding repair on the welded cover due to ABF QC noted overlap at approximately Y=9475mm to Y=9780mm. The welder has ground and removed the overlap then tested by QC Steve Mc Connell using Magnetic Particle Testing (MT) with affirmative result. The removal was verified by this QA and obtained same result. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing

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welding procedure ABF-WPS-D15-1001-Repairs. The weld cover repair was preheated to more than 300 degree Fahrenheit using propylene gas torch prior welding. During the shift, ABF QC John Pagliero was noted monitoring the welder. Measured welding parameter during welding was 120 amperes on a 1/8" diameter E7018H4R electrode. At the end of the shift, 3G SMAW weld cover repair was completed.

At Tower Base Elevation 13Meters, Electro Slag Welding (ESW) the following ESW weld locations where run off tab removed and noted with linear indications were excavated using carbon air arc gouging followed by die grinder. While ABF personnel were excavating the indications, ABF QC was also noted performing Magnetic Particle Testing (MT) to confirm the removal of the indications. After the removal and confirmation from ABF QC, this QA also performed verification on the complete removal of the linear indications. The following ESW weld locations were excavated, MT tested by ABF QC and MT verified by this QA;

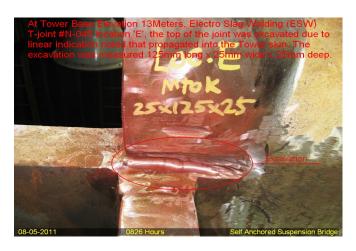
ESW Weld Location Excavation Dimension (L x W x D) QA MT

1. 'E' (N-045) 125mm x 25mm x 25mm MT Passed 2. 'F' (E-045) 120mm x 30mm x 24mm MT Passed 3. 'R' (E-041) 290mm x 50mm x 30mm MT Passed MT Passed 4. 'S' (S-041) 210mm x 50mm x 30mm

MT Passed 5. 'Q' (E-043) Top one foot only 6. 'K' (E-042) Top two feet only MT Passed









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Summary of Conversations:

No significant conversation ocurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer